## Recommended Indicators DRAFT June 29, 2009

Indicator	Availability of Data/Information	Frequency of Updates	Geography of the Indicator (County, Municipality, Region, State)	Empirical Data vs. Derived Analysis	What does the indicator tell us? What Goal is it Accomplishing?	Issues with Indicator	Who is responsible for Reporting?	DRAFT Workgroup Recommendation		
1. Housing Choices, including affordability:										
Rental Housing Characteristics - Rental Housing Shortfall by County	Data is currently produced by DHCD	Annual	State, County	Derived Analysis	Identifies demand for affordable/workforce rental housing		DHCD	ОК		
Cost Burdened Households (all household types) a. Owner Costs as % of Household Income b. Renter Costs as % of Household Income	ACS/CHAS Data	ACS frequency depended on population size and projections	State, County	Empirical and Derived	Identifies extent of households that have a cost burden (paying too much for housing) for renters, owners, and elderly.		DHCD	ОК		
2. The Impact of Growth on	the Environment, including I	Land, Air, & Water	:							
Amount of impervious surface	Would have to be generated. MDP's land use layer could be the base for this.	Every 5 years	Municipality, County, watershed	MDP derived the impervious cover from land use classifications.	The percent impervious surface in a watershed correlates with the health of aquatic resources. The watersheds with the highest values for this indicator offer the greatest potential for implementation of best management practices whose objective is to filter runoff and moderate runoff peak velocities. GOAL: Environmental Protection.	Would be a generalized estimate of impervious surface.	MDP/local government	ОК		
Development on septic systems	Available from MDE/MDP	Annual	County	Number of septic systems is empirical; pounds of nitrogen released could be derived	The increase in the number of septic systems is an indication of the number of buildings constructed in areas not served by public systems. GOAL: Environmental Protection		MDE/Local Governments/MDP	ОК		
Percentage of new development served by public sewer (as opposed to onsite sewage disposal system, such as septic systems)	MDP has a method to collect this information using the County Master Water and Sewer Plans  Many local governments have this information	Annual	County	Empirical	Public sewer generally correlates with denser development and development closer to existing communities. GOAL: Environmental Protection.	This indicator depends on accurate Water and Sewer plan data. MDP collects this but many Water and Sewer plans are outdated and the maps may not accurately reflect where sewer service actually exists.	County/MDP	ОК		

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Percentage of streams sampled with each score (1 through 5) on the Benthic Index of Biotic Integrity (IBI) (non-tidal)	Available from DNR/RAS/MANTA	Every 3 to 5 years	MD 8 digit watershed	Empirical	Health of streams. GOAL: Environmental Protection and Resource Conservation	Sampling is random and may not be representative. Different streams may be sampled each time.	DNR	ОК	
Percentage of streams sampled with each score (1 through 5) on the Non- tidal Fish Index of Biotic Integrity (IBI)	Available from DNR/RAS/MANTA	Every 3 to 5 years	MD 8 digit watershed	Empirical	Health of streams. GOAL: Environmental Protection and Resource Conservation	Sampling is random and may not be representative. Different streams may be sampled each time.	DNR	ОК	
Acres of open space in permanent protection (including parks, forests, wetlands, agricultural land) and the means of protection (easement type, fee simple ownership, donated etc.)	Available from DNR/MDA/Counties/MDP	Annual	County/State	Empirical	Indicator of where tracts of resource lands are being permanently preserved across the State. GOAL: Resource land conservation	May be difficult to capture all the data. For example, MDE sometimes imposes permanent protection of wetlands and buffers in permits. (Remember HB 754 from 2009?)	DNR	ОК	
The amount of forest acres cleared, conserved, and planted	This indicator should be tied to Forest Conservation Act implementation: acres of forest conserved on-site, planted on and off site, and fee-in-lieu activities.  DNR is working on using NAIP aerial photography to track this indicator	Annual	County	Derived	It is not environmentally beneficial to clear forest; conservation of forest is generally good; establishing new forests has many environmental benefits. GOAL: Resource Conservation	The indicator tells us little about the quality of the forest, e.g., the size of the contiguous tracts or the habitat value.	DNR is required to report annually. See Nat. Res. Code Section 5-1613.	ОК	
Acres retrofit with stormwater controls.	Available from MDE for jurisdictions covered by MS4 permits	Annual	County	Empirical	A great deal of development occurred before the stormwater programs began. Retrofitting is (or is going to be) required in Municipal Separate Storm Sewer System Permits (MS4 Permits). GOAL: Environmental Protection	This indicator is not directly related to growth, but it does represent investment in land management to restore the environment. It may not be available in all jurisdictions.	MDE	ОК	
Wastewater treatment plant capacity and reported flow.	MDE	Annual	By WWTP, could be aggregated to region	Empirical	Increases in capacity result from investment in infrastructure to serve relatively compact growth. The difference between capacity and flow usually indicates whether there is a potential for growth. GOAL: Environmental Protection and Infrastructure	Capacity rarely changes for a specific WWTP. If tracked by construction permits, data will not reflect when the plant comes on line or when it will use all the capacity.	MDE	ОК	
Land Use Change - loss of agricultural resource lands	MDP land use/land cover layer and parcel information	Updated every 5 years (parcels updated annually)	County	Empirical	Estimate of acres of land lost to development over time	Frequency of updates, data compatibility over time	MDP/local government	OK	
3. The Fiscal Cost of Growth:									
Annexation by Municipalities	All Municipalities	Annual	Municipalities	Empirical	With HB1141 Requirements, Capacity/Density		Municipalities	OK	
School Construction	Counties	Annual	Counties	Empirical	Adequacy of facilities based on growth/carrying capacity	Inconsistency of acceptable capacity levels from county to county school system.	Counties	ОК	
Park Acquisition and Development	Counties/Municipalities/DNR	Annual	County/City/state/Regional	Empirical	Ability to meet national standards in growth	Non-standardization of parks, better held to counties and municipalities only, except DC Suburban	County/City/State/Regional	ОК	

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Per capita capital spending inside and outside the PFA	DLS/Local Governments	Annual	County/Municipality	Empirical	Over time, this indicator could indicate a trend about growth-related spending inside and outside PFAs	Will take time to show trends	Counties Municipalities	OK			
4. The Job and Housing Bala	. The Job and Housing Balance:										
Jobs-Labor Force Ratio	BLS and DLLR for labor force data	Annual	County/Region	Empirical	Can inform as to the basic relationship between demand and supply of labor at the County level, but should NOT be used to set a particular "ideal" ratio. A ratio is also more relevant at the region level, where the component counties are all in the same job market/labor force shed.	Will have different measures of jobs (BEA/BLS) which would yield different results. Use of households or housing unit data, while the more common measure, will neglect to take into account different demographics of populations and ultimately different labor force characteristics.	County/MDP	ОК			
5. The Impact of Transportat	5. The Impact of Transportation on Growth:										
Mode shares of transit, walk and bike for work or non-work, telecommuting	American Community Survey (Census Bureau)	1 year and three and/or five-year averages depending on population size	Statewide/region	Survey	Indicates the percentage of people who use transit, bike, walk, or other non-SOV travel. Goals: to increase transportation choices; investment in transit and other alternative transportation; maximize transportation system connectivity,		MDOT	ОК			
Transit ridership rates	MTA, local transit systems	annual	Statewide, region, local,		indicates the increase/decrease of transit usages. Goal: encourage transit usages		MTA/Local transit system	OK			
State or Local major transportation investment inside or outside PFAs	State: CTP; Local: CIP	annual	State, local jurisdictions	Empirical	Indicates where major state and local transportation improvements are implemented and how they may affect growth. Goal: invest major transportation facility improvements to support growth inside PFAs		MDOT/MDP	OK			
Percent use of park and ride facilities	SHA	Annual	(per facility(?)	Empirical	Use of transportation alternatives.		MDOT	ОК			
Miles of marked bike lanes in PFA areas.	County/SHA	Annual	County/PFA	Empirical	Indicates investment in alternative transportation modes.		MDOT	ОК			
6. The Impact of Growth on Business, including Job Creation, Fiscal Impact, Agribusiness, Toursim, & Forestry:											
Tax revenues by source	Census; Comptroller's Office	Annual	State/County	Empirical	Revenues and expenditures can indicate the		County	OK			
Expenditure data by type	Census; Comptroller's Office	Annual	State/County	Empirical	general economic picture of the State		County	OK .			
Employment by industry	U.S. BLS, U.S. BEA, DLLR (ES- 202)	Quarterly/Annually	County	BLS and BEA data are derived, but ES202 data are supposedly empirical	We could track the relative strength of specific industries. We may find trends showing that certain industries decline or grow faster or slower	We could highlight a relationship between growth and employment/wage trends, but it wouldn't establish a causal relationship as anticipated by the indicator bill's wording.	County	ОК			
Wages by industry (total, average weekly wage per worker, and relative to state totals)	U.S. BLS, U.S. BEA, DLLR (ES- 202)	Quarterly/Annually	County	BLS and BEA data are derived, but ES202 data are supposedly empirical	in those counties with higher rates of population growth or new development.	There are some concerns about the ES-202 data, though generally they are considered reliable.	County	ОК			

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Number of establishments by industry	DLLR (ES-202)	Quarterly/Annually	County	Empirical			County	ОК
7. The Impact of Growth on (	Cultural and Historic Resour	rces:						
Number of projects reviewed for compliance with federal and State laws (i.e. "Section 106" Reviews)	Data currently maintained by MD Historic Trust (MHT) staff	Annually	County/municipality	Empirical	(i.e. no effect, no adverse effect or adverse affect), so it could tell us where growth is	Section 106 reviews are only completed for projects requiring State or federal funding, permits or licenses. Privately funded or county/municipal-funded projects not requiring licenses or permits would not be counted.	MHT	ОК
Number of demolition permits issues for properties 50 years old and older.	Most jurisdictions track demolition permits. Adjustments may need to be made to track the date of the building.	?	County/municipality		It tells us the number of potentially historic properties demolished.	It may be hard to tell if the demolition was completed to allow new development on the property or if it was demolished just to be demolished. It would be ideal if we could capture this information in the permit process, (i.e. demolition for redevelopment, threats to un-insure by insurance company, or condemnation by local authorities.	County Governments and Municipalities	ОК
Number of building permits issues for properties 50 years old and older.	Most jurisdictions track building permits. Adjustments may need to be made to track the date of the building.	?	County/municipality		It tells us the number of potentially historic properties rehabilitated.		County Governments and Municipalities	ОК